

REMARKS

Claims 4-30 and 48-52 are pending. By this Amendment, claim 4 is amended and claims 45 and 46 are cancelled. Support for the features recited in the amended claim 4 can be found in step S104 of Figs. 9-11, for example. Applicant appreciates the allowance of claims 49-51.

An Election of Species was required in this application. Accordingly, Applicant elected Species II, Figs. 8-18. Applicant asserts that claims 4-30 and 48-52 read on elected Figs. 8-18.

Claims 45, 46 and 52 were rejected under 35 U.S.C. §112, first paragraph. The rejection of claims 45 and 46 has been rendered moot. The rejection of claim 52 is respectfully traversed.

A white balance calculator that reads out and processes signals once again from the pixels of the image sensor without resetting the signals of the image sensor, after completion of reading out from the image sensor for the process of the processor, as recited in claim 52, is clearly described in Applicant's specification. Fig. 9, steps S104 and S105 and page 34, line 19-page 35, line 6, for example, clearly describes how a white balance calculator reads out and processes signals once again from the pixels of the image sensor. It is respectfully requested that the rejection be withdrawn.

The rejections of claim 45 under 35 U.S.C. §102(e) over Norita et al. (Norita), U.S. Publication No. 2004/0169767, and claim 46 under 35 U.S.C. §102(e) over Neter, U.S. Patent No. 6,888,568, have been rendered moot.

Claim 48 was rejected under 35 U.S.C. §102(e) over Hata, U.S. Publication No. 2004/0061801. The rejection is respectfully traversed.

Hata fails to disclose a digital camera with an image sensor having a plurality of two dimensionally arranged pixels capable of selectively reading out signals from desired pixels

for the purpose of at least two of the processes for light metering, focus detection, white balance calculation and picture image forming for recording, wherein, in response to completion of an output of a certain signal from the image sensor, a signal for implementing another process is output in parallel with immediate process of the signal, as recited in claim 48.

Hata discloses an automatic focusing device, wherein the AF area 1 (Fig. 6) is set in the AF area by registering data values "from_aflwdx" and "from_aflwdy" in registers "aflwdx" and "aflwdy" of the IPP107 (Fig. 8, step S1 and paragraph [0047]). In other words, an area where the CCD 103 reads is not set herein, but the AE area shown in Fig. 5 and the AF area shown in Figs. 6 and 7 are set inside the IPP (Image Pre-Processor) 107. Hata thus fails to read a signal of a pixel selected from the image sensor, as recited in claim 48.

It is respectfully requested that the rejection be withdrawn.

Claims 4, 5, 14, 15, 19-21, 25 and 26 were rejected under 35 U.S.C. §103(a) over Kijima et al. (Kijima), U.S. Patent No. 6,661,451, in view of Norita, claims 4 and 14-16 were rejected under 35 U.S.C. §103(a) over Hieda et al. (Hieda), U.S. Patent No. 6,353,488, in view of Norita, and claims 4-14, 17, 18 and 22-24 were rejected under 35 U.S.C. §103(a) over Suzuki et al. (Suzuki), U.S. Patent No. 5,751,354, in view of Norita. The rejections are respectfully traversed.

None of the applied references disclose or suggest a digital camera with a processor for light metering read signals of given pixels located in a given area narrower than the whole imaging area of the image sensor, and including a timer for determining a time length from a start of the accumulation of charge to a time when a signal from the image sensor reaches a predetermined level, the light metering being on the basis of the time length, wherein the image sensor again accumulates a charge for storing an image on the basis of a result of the light metering after resetting, as recited in claim 4.

Pages 8, 11 and 14 of the Office Action respectively admit that Kijima, Hieda and Suzuki fail to explicitly state that the time length is determined from a start of the accumulation of charge to a time when a signal from the image sensor reaches a predetermined level, as recited in claim 4. Kijima, Hieda and Suzuki thus fail to disclose or suggest an image sensor that again accumulates a charge for storing an image on the basis of the result of the light metering (which is based on the time length) after resetting, as recited in claim 4.

Norita fails to overcome the deficiencies of Kijima, Hieda and Suzuki. Norita discloses a digital camera, wherein in a manual exposure mode when a release button 30 is pressed and a predetermined time T1 has elapsed, the accumulated data is read out from the image sensor 9, and is (1) stored in the buffer memory 82 and (2) then displayed on the LCD 51 (paragraphs [0115] - [0116]). If the data is judged to be underexposed at this moment when it is viewed on the LCD 51, a passage of a predetermined time T2 is further waited for. Then, an action of storing in the buffer memory 82 is repeated, and when the image displayed on the LCD 51 is judged as correctly exposed, pressing the release button 30 causes the photographed data stored in the buffer memory 82 to be written into the recording medium 7 (paragraphs [0117] - [0121]). Namely, Norita's accumulated image data is read out from the image sensor 9 with nondestructively and the data judged to be at an optimum exposure by the photographer is simply written to the recording medium 7 intact.

Contrary to claim 4, it is not disclosed in Norita that AE calculation is implemented on the basis of the readout signal level, and that the image data for writing into the recording medium 7 is created again on the basis of the result of the AE calculation. Claim 4 does not refer to the readout with destructively and the readout with nondestructively when the AE calculation is implemented. Claim 4 is applicable to any of the readout methods as the readout method detailed in Figs. 13 and 14, for example.

As described above, Norita fails to provide any suggestion with respect to the AE calculation and the usage of the calculation result in the next shooting for writing into the recording medium 7. As such, even if Norita is combined with Kijima, Hieda or Suzuki, it is impossible for them to obtain the effect of claim 4.

It is respectfully requested that the rejections be withdrawn.

Claims 27-29 were rejected under 35 U.S.C. §103(a) over Kijima in view of Norita and JP11-344662 (JP'662), and claim 30 was rejected under 35 U.S.C. §103(a) over Kijima in view of Norita, JP'622 and JP 09-184973 (JP'973). The rejections are respectfully traversed.

JP'662 and JP'973 fail to overcome the deficiencies of Kijima and Norita as applied to claim 4.

It is respectfully requested that the rejections be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



Mario A. Costantino
Registration No. 33,565

Scott M. Schulte
Registration No. 44,325

MAC:SMS/sxb

Date: January 20, 2006

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461
--